UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of

Docket No. 40-8912 License No. SUA-1480

<u>Michael P. Grace</u> Venice, California

ORDER MODIFYING LICENSE (EFFECTIVE IMMEDIATELY)

I

Michael P. Grace (Licensee) is the holder of Source Material License No. SUA-1480 issued by the Nuclear Regulatory Commission (NRC or Commission) pursuant to 10 CFR Part 40. The license authorizes activities at three sites: Site I, an in situ leach operation (ISL) located near the community of Church Rock, New Mexico; Site 2, an ISL located near the community of Bibo, New Mexico; and Site 3, a heap leach located near the community of Magdalena, New Mexico. The license authorizes in situ leaching, heap leaching, processing into uranium concentrate, storage, and distribution to authorized recipients at three sites defined in the license. The license was originally issued by the State of New Mexico and was subsequently made an NRC license by Order CLI-86-10, dated May 23, 1986, whereby the NRC accepted the return of authority over the licensing and regulation in New Mexico of the extraction and concentration of source material from source material ore and the management and disposal of the resulting byproduct material as defined in Section 11e(a) of the Atomic Energy Act of 1954, as amended. The license was subsequently numbered SUA-1480 and reissued January 15, 1993.

II

The status of the three sites authorized under Source Material License SUA-1480 has been in question since the State of New Mexico returned its program to NRC. On January 21, 1988, the NRC contacted Grace Energy Company in California. Grace Energy Company was used as part of the Licensee's address by the State of New Mexico and the name was used in various NRC contacts with Licensee representatives. During subsequent telephone conversations, the NRC was told that the State of New Mexico had performed verification surveys and issued a clearance for the sites. The NRC informed the Licensee representative that no such records existed in the files transferred from the State of New Mexico and that such documentation should be sent to the NRC in order to determine the adequacy of the reclamation and proceed with license termination. The last contact was an undated, handwritten letter from the Grace Energy company operations manager which included some documents, none of which evidenced any site reclamation activities having occurred, and no indications of State verifications or approvals were included.

An NRC visit to Site 1 near Church Rock, New Mexico, and an NRC inspection conducted at the Site 2 in situ leach facility located near the community of Bibo, New Mexico, found the sites abandoned, but not reclaimed. Though not inspected, it is assumed that Site 3 is in similar condition. The inspection report was sent by letter dated December 4, 1992.

9312220072 931215 PDR ADOCK 04008912 C PDR After NRC site visits determined that at least two of the three authorized sites had not been reclaimed, the Licensee's license was reissued as Source Material License SUA-1428 by certified letter dated January 15, 1993. The license was a copy of what NRC interpreted as the current source material license, based on the license files transmitted by the State of New Mexico. The Licensee was requested to file a license amendment request within 30 days to upgrade the license to include standard conditions found in all other NRC milling licenses and to delete conditions which are no longer applicable. In addition, as the license cannot be terminated until the sites are reclaimed to meet the appropriate closure criteria in 10 CFR 40, Appendix A, the Licensee was requested to submit no later than June 1, 1993, a plan for reclamation of the sites for NRC review. It was indicated in the letter that voluntary cooperation in meeting the NRC requirements would preclude the need for pursuing enforcement actions to assure compliance.

The January 15, 1993, certified letter was acknowledged by a signed receipt as having been received on January 21, 1993. As the 30-day limit passed, an attempt was made to contact representatives of Michael P. Grace or Grace Energy Company. No telephone listings were discovered; however, it was learned that Mr. Grace, or his heirs, held several oil and gas leases in the State of New Mexico and maintained an office in Carlsbad, New Mexico. Mr. Michael Morris, Grace Oil Company, Carlsbad, New Mexico, was contacted by telephone on February 22, 1993. Although he was unwilling to provide a contact name or telephone number, he indicated he would be willing to convey a message to a representative of the Licensee. An additional message was left for Mr. Morris on February 26, 1993.

Mr. Lamb, an attorney with Lamb, Metagar, Lians, and Dahl of Albuquerque, New Mexico, contacted the NRC's Uranium Recovery Field Office (URFO) by telephone on February 26, 1993. Mr. Lamb's firm had reportedly represented Michael P. Grace in the 1984 lawsuit with the State of New Mexico regarding reclamation of the three licensed sites. Mr. Lamb indicated that contacting Mr. Grace may not only be very difficult, but that it would probably be fruitless.

There was no further contact between Licensee representatives and URFO until a caller identifying herself as an employee of Grace Energy Company called on July 22, 1993, to discuss the bill Grace Energy Company had received for the November 19, 1992, inspection of Site No. 2. She was unwilling to provide her name or a contact point. It was subsequently learned that she had been referred to URFO by the License Fee and Debt Collection Branch (LFDCB). She had identified herself to LFDCB as Ms. Quinta Jones and had provided a new address, P.O. Box 731, Venice, California, for correspondence with Grace Energy Company. LFDCB faxed a copy of the appropriate inspection report to her in Venice, California.

Based on the above, it has been concluded that the Licensee has not been responsive to NRC requests outlined in the January 15, 1993, letter to (1) file a license amendment to update the current license to reflect the nonoperational status of the three sites, and (2) submit a reclamation plan for the three sites. The current license does not contain the standard safety and health conditions to protect employees and the public. Two of the three licensed sites appear to have been abandoned. Wells were observed that had been left uncapped; unknown substances were found in deteriorating barrels; potentially dangerous trash, such as batteries, were littering the ground; ponds that had once held contaminated solutions were still capable of retaining fluids. The apparent abandonment of these sites demonstrates insufficient regard for the public health and safety. The status of the third site is unknown, but it is assumed that it is also similarly abandoned.

Consequently, I lack the requisite reasonable assurance that the Licensee's current operations can be conducted under License No. SUA-1480 in compliance with the Commission's requirements and that the health and safety of the public, including the Licensee's employees, will be protected. Therefore, the public, health, safety, and interest require that License No. SUA-1480 be modified to require standard administrative and safety requirements associated with nonoperational facilities and submittal of plans for restoration, decommissioning, decontamination, and reclamation of the facilities in accordance with applicable standards and regulations. Furthermore, pursuant to 10 CFR 2.202, I find that the significance of the conduct described above is such that the public health, safety, and interest require that this Order be immediately effective.

IV

Accordingly, pursuant to sections 103, 161b, 161i, 161o, 182, and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Part 40, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT LICENSE NO. SUA-1480 IS MODIFIED BY ADDING THE FOLLOWING SECTIONS NUMBERED 6 THROUGH 32 AS FOLLOWS:

- Byproduct, source, and/or special nuclear material: Source or Byproduct Materials
- 8. Maximum amount that Licensee may possess at any one time under this license: That amount resulting from restoration, decommissioning, decontamination, and reclamation of the authorized places of use.
- 9. Authorized Places of Use: Site 1 in situ facility located approximately 20 road miles northeast from Gallup, New Mexico (NE1/4 NE1/4, Section 23, T16N, R7W); Site 2 in situ facility located approximately 25 road miles northwest from Rio Puerco Trading Post on I-40, New Mexico (NW1/4, Section 13, T12N, R4W); and Site 3 heap leach facility located approximately 20 road miles northwest from Magdalena, New Mexico (southwest corner of Section 13, T1N, R6W) as specified.
- Authorized Use: For maintenance, restoration, decommissioning, decontamination, and reclamation of licensed sites.
- 11. Individual plans for restoration, decommissioning, decontamination, and reclamation shall be submitted on or before July 1, 1994.
- The Licensee's corporate organization structure shall be submitted for NRC approval by April 1, 1994.

13. The Licensee shall comply with applicable portions of 10 CFR part 20.

- 14. Before engaging in any activity not previously assessed by the NRC, the Licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not previously assessed or that is greater than that previously assessed, the Licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC in the form of a license amendment.
- 15. In order to ensure that no disturbance of cultural resources occurs, the Licensee shall have an archeological and historical artifact survey of disturbance areas performed prior to their disturbance. Survey areas shall include any area that is used for borrow or storage during restoration, decommissioning, decontamination, and reclamation. These surveys shall be submitted to the NRC and no disturbance shall occur until the Licensee has received authorization from the NRC to proceed.
- 16. The Licensee shall maintain an area within a restricted area boundary for storage of contaminated materials prior to their disposal. All contaminated wastes and evaporation pond residues shall be disposed at a licensed radioactive waste disposal site.
- The Licensee shall establish effluent and environmental monitoring programs. The programs shall be submitted for NRC review and approval by July 1, 1994.
- 18. The results of effluent and environmental monitoring shall be reported in accordance with 10 CFR 40, Part 40.65, to the NRC, Uranium Recovery Field Office.
- 19. Release of equipment, materials, or packages from the restricted area shall be in accordance with the attachment to this license entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials," dated September 1984.
- 20. The Licensee shall employ or maintain on a consulting basis a qualified Radiation Safety Officer (RSO) who is responsible for radiation safety aspects of the facilities. The RSO shall possess the minimum qualifications as specified in Section 2.4.1 of Regulatory Guide 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Mills will be As Low As is Reasonably Achievable."

The Licensee shall, by utilization of a qualified RSO, provide training, safety instructions, and dosime*.y services for all workers routinely visiting the facilities adequate to assure compliance to 10 CFR Part 20 and guidelines contained in Regulatory Guides 8.30 and 8.31.

21. Standard operating procedures (SOPs) shall be established for all restoration, decommissioning, decontamination, and reclamation activities involving radioactive materials that are handled, processed, or stored.

SOPs for restoration, decommissioning, decontamination, and reclamation activities shall enumerate pertinent radiation safety practices to be followed. In addition, written procedures shall be established for nonoperational activities to include in-plant and environmental monitoring, bioassay analysis, and instrument calibration. An up-to-date copy of each written procedure shall be kept in each area where it is used.

All written procedures shall be reviewed and approved in writing by a qualified RSO before being implemented and whenever a change in a procedure is proposed. It shall be documented that all existing facility procedures are reviewed and approved on an annual basis.

- 22. The Licensee shall have a training program for all site employees as described in Section 2.5 of Regulatory Guide 8.31.
- 23. For work where the potential for exposure to radioactive materials exists and for which no SOP exists, a radiation work permit (RWP) shall be required. Such permits shall describe the following:
 - A. The scope of work to be performed.
 - B. Any precautions necessary to reduce exposure to uranium and its doughters to levels as low as is reasonably achievable (ALARA).
 - C. Any supplemental radiological monitoring and sampling required during and following completion of the work. Nonroutine maintenance involving exposure of workers to airborne particulates of uranium and its daughters shall require the use of continuous breathing zone monitoring.

The RSO shall indicate by signature the review of each RWP prior to the initiation of the work.

- 24. Any visitor, including contractors, shall be required to register and shall be given appropriate instruction in the areas of security, safety, and radiation protection, prior to entering controlled or restricted areas.
- 25. The Licensee shall issue to all site employees either thermoluminescent dosimeters (TLDs) or film-type dosimeters which shall be exchanged and read on a quarterly frequency.
- 26. The Licensee shall require that all process and maintenance workers who work in yellowcake areas or work on equipment contaminated with yellowcake wear protective clothing including coveralls and boots or shoe covers. Workers who package yellowcake slurry for transport shall wear gloves.
- 27. All radiation monitoring, sampling, and detection equipment shall be recalibrated after each repair and as recommended by the manufacturer, or at least annually, whichever is more frequent. In addition, all radiation survey instruments shall be operationally checked with a radiation source each day when in use.

- 28. Occupational exposure calculations shall be performed and documented within 1 week of the end of each regulatory compliance period as specified in 10 CFR 20.103(a)(2) and 10 CFR 20.103(b)(2). Routine radon daughter and particulates shall be analyzed in a timely manner to allow exposure calculations to be performed in accordance with this condition. Nonroutine samples shall be analyzed and the results reviewed by the qualified RSO within 2 working days after sample collection.
- 29. The Licensee shall perform an annual ALARA audit of the radiation safety program which shall be conducted by the RSO or other authorized individual with equivalent qualifications, in accordance with Section 2.3.3 of Regulatory Guide 8.31. A report of this audit shall be submitted to the NRC, Uranium Recovery Field Office, within 60 days after conducting the audit. The report shall include detailed summaries of the analytical results of the radiological surveys. The audit shall also address any noticeable trends in personnel exposures for identifiable categories of workers and types of activities, any trends in radiological effluent data, and the performance of exposure and effluent control equipment as well as its utilization, maintenance, and inspection history. Any recommendations to further reduce personnel exposures or environmental releases of uranium or radon and radon progeny shall be included in the report.
- 30. The results of the sampling, analyses, surveys, and monitoring, the results of calibration of equipment, reports on audits and inspections, all meetings and training courses required by this license, and any subsequent reviews, investigations, and corrective actions, shall be documented. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained for a period of at least 5 years.
- 31. The Licensee shall maintain a general emergency action plan establishing authorities and procedures to be followed for a variety of potential accidents likely to occur.
- The Licensee shall submit a site closure cost estimate adequate to cover 32. the estimated costs, if accomplished by a third party, for completion of the NRC-approved site closure plan including; above-ground decommissioning and decontamination, the cost of offsite disposal of radioactive solid process or evaporation pond residues, and ground-water restoration, as warranted. Within 3 months of NRC approval of a site closure plan and cost estimate, the Licensee shall submit, for NRC review and approval, a proposed financial surety arrangement consistent with 10 CFR 40, Appendix A, Criterion 9. The surety shall then be in effect within 3 months of written NRC approval. Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criterion 9, shall be provided to the NRC at least 3 months prior to the anniversary of the effective date of the existing surety instrument. If the NRC has not approved a proposed revision 30 days prior to the expiration date of the existing surety arrangement, the Licensee shall extend the existing arrangement, prior to expiration, for 1 year. Along with each proposed revision or annual update, the Licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency,

changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The basis for the cost estimate is the NRC-approved site closure plan or the NRC-approved revisions to the plan.

The Regional Administrator, Region IV, may, in writing, relax or rescind any of the above conditions upon demonstration by the Licensee of good cause.

V

In accordance with 10 CFR 2.202, the Licensee must, and any other person adversely affected by this Order may, submit an answer to this Order, and may request a hearing on this Order, within 20 days of the date of this Order. The answer may consent to this Order. Unless the answer consents to this Order, the answer shall, in writing and under oath or affirmation, specifically admit or deny each allegation or charge made in this order and set forth the matters of fact and law on which the Licensee or other person adversely affected relies and the reasons as to why the Order should not have been issued. Any answer or request for a hearing shall be submitted to the Secretary, U.S. Nuclear Regulatory Commission, ATTN: Chief, Docketing and Services Section, Washington, D.C. 20055. Copies also shall be sent to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, to the Assistant General Counsel for Hearings and Enforcement at the same address, to the Regional Administrator, NRC Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011-8064, and to the Licensee if the answer or hearing request is by a person other than the licensee. If a person other than the Licensee requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.714(d).

If a hearing is requested by the Licensee or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained.

Pursuant to 10 CFR 2.202(c)(2)(i), (57 FR 20194) May 12, 1992, the Licensee, or any other person adversely affected by this Order, may, in addition to demanding a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the ground that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error. In the absence of any request for hearing, the provisions specified in Section IV above shall be final 20 days from the date of this Order without further order or proceedings. AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

FOR THE NUCLEAR REGULATORY COMMISSION

James L. Milhoan, Regional Administrator Region IV amers

Attachment: As stated

Dated at Arlington, Texas, this 15th day of December 1993 GUIDELINES FOR DECONTAMINATION OF FACILITIES AND EQUIPMENT

PRIOR TO RELEASE FOR UNRESTRICTED USE

OR TERMINATION OF LICENSES FOR

BYPRODUCT OR SOURCE MATERIALS

U. S. Nuclear Regulatory Commission Uranium Recovery Field Office Region IV Denver, Colorado 80225

SEPTEMBER 1984

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The instructions in this guide in conjunction with Table I specify the radioactivity and radiation exposure rate limits which should be used in accomplishing the deccatamination and survey of surfaces or premises and equipment prior to abandonment or release for unrestricted use.

- The licensee shall make a reasonable effort to eliminate residual contamination.
- Radioactivity on equipment or surfaces shall not be covered by paint, plating, or other covering material unless contamination levels, as determined by a survey and documented, are below the limits specified in Table I prior to applying the covering. A reasonable effort must be made to minimize the contamination prior to use of any covering.
- 3. The radioactivity on the interior surfaces of pipes, drain lines, or ductwork shall be determined by making measurements at all traps, and other appropriate access points, provided that contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines, or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated but are of such size, construction, or location as to make the surface inaccessible for purposes of measurement shall be presumed to be contaminated in excess of the limits.
- 4. Upon request, the Commission may authorize a licensee to relinquish possession or control of premises, equipment, or scrap having surfaces contaminated with materials in excess of the limits specified. This may include, but would not be limited to, special circumstances such as razing of buildings, transfer of premises to another organization continuing work with radioactive materials, or conversion of facilities to a long-term storage or standby status. Such requests must:
 - a. Provide detailed, specific information describing the premises, equipment or scrap, radioactive contaminants, and the nature, extent, and degree of residual surface contamination.
 - b. Provide a detailed health and safety analysis which reflects that the residual amounts of materials on surface areas, together with other considerations such as prospective use of the premises, equipment or scrap, are unlikely to result in an unreasonable risk to the health and safety of the public.

- 5. Prior to release of premises for unrestricted use, the licensee shall make a comprehensive radiation survey which establishes that contamination is within the limits specified in Table I. A copy of the survey report shall be filed with the Uranium Recovery Field Office, Region IV, P.O. Box 25325, Denver, CO 80225. The survey report shall:
 - a. Identify the premises.
 - b. Show that reasonable effort has been made to eliminate residual contamination.
 - Describe the scope of the survey and general procedures followed.
 - State the findings of the survey in units specified in the instruction.

Following review of the report, the NRC will consider visiting the facilities to confirm the survey. The licensee shall not release the premises for unrestricted use without the written approval of the USNRC staff.

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ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDES ^a	AVERAGE ^{b c f}	MAXIMUM ^b d f	REMOVABLE ^{b e f}		
U-nat, U-235, U-238, and associated decay products	5,000 dpm /100 cm²	15,000 dpm /100 cm²	1,000 dpm /100 cm²		
Transuranics, Ra-226, Ra-228, Th-230, Th-118, Pa-231, Ac-227, I-125, I-129	100 dpm/100 cm²	300 dpm/100 cm²	20 dpm/100 cm²		
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	1,000 dpm/100 cm²j	3,000 dpm/100 cm²	200 dpm/100 cm ²		
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except SR-90 and others noted above.	5,000 dpm /100 cm²	15,000 dpm /100 cm²	1,000 dpm /100 cm²		

^aWhere surface contamination by both alpha- and beta-gamma emitting nuclides exists, the limits established for alphaand beta-gamma-emitting nuclides should apply independently.

^bAs used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

^CMeasurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.

^dThe maximum contamination level applies to an area of not more than 100 cm².



^eThe amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.

^fThe average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.

- October 1975 State of New Mexico (NM) learns that two in situ leach (ISL) facilities (later to be known as sites 1 and 2) were being operated by Michael P. Grace, DBA Grace Nuclear Company, without the filing of a Notice of Intent to Discharge or Plans and Specifications with the NM Environmental Improvement Division (EID). Letter issued by Water Quality Division of NMEID to Grace Nuclear Company on October 7, 1975, informed Grace of such requirements and expected compliance by October 20, 1975.
- November 14, 1975 Grace makes applications for a Radioactive Materials License and Notice of Intent to Discharge with NM. Sites 1 and 2 are ISL facilities and Site 3 is a heap leach. Material extracted was transported to the Kerr-McGee Mill at Ambrosia Lake.
- November 26, 1975 NMEID issues an order to cease operations until a license is issued.
- 4. January 24, 1976 Commitment from Grace to reclaim Site 3.
- March 5, 1976 Radioactive Material License NM-GRA-UL-00 issued by NMEID with an expiration date_of March 31, 1981.
- 6. March 23, 1979 NMEID internal memorandum documenting a visit to Site 2 on March 21, 1979, refers to the site as "appears to have been abandoned for some time; however, various materials were left onsite and are scattered over the landscape."
- 7. August 28, 1979 NMEID visit to Site 3 noted numerous excavated pits, shallow boreholes, a concrete pad and pit, and a shallow horizontal shaft with a sign "Explosives, Keep Out." Springs and an intermittent stream indicated that ground water was at or near the surface, causing a potential for ground-water contamination. Memo noted that the site has been inactive for several years, and mineral rights have been leased by another company (which was not named).
- Visits by NMEID to Site 1 on November 14, 1980, and Site 2 on November 19, 1980, found debris, open wells, etc. Unable to visit Site 3.
- March 27, 1981 Letter from NMEID to attorney for Mr. Grace, advising that a reclamation plan must be submitted, approved, and completed prior to license termination and outlining the process involved. Expiration of license extended to September 30, 1981.

- 10. June 5, 1981 Letter from NMEID to attorney for Mr. Grace, advising that no response had been received to March 27, 1981, letter and further advising that failure to respond would result in legal action.
- 11. September 18, 1981 Expiration of license extended to March 31, 1982.
- September 22, 1981 Santa Fe Railroad grants limited permission for Grace to access Site 3 to perform reclamation work.
- December 4, 1981 Letter from NMEID to attorneys for Grace, advising that a reclamation plan is due by January 10, 1982, or legal proceedings would be commenced.
- 14. March 19, 1982 Expiration date of license extended to June 30, 1982.
- 15. March 24, 1982 Letter to Grace from NMEID notifying of a hearing to be held on April 14, 1982, pertaining to continued violations. Hearing date was later changed to April 28, 1982.
- April 8, 1982 Visits by NMEID to Sites 1 and 2; no changes. Unable to obtain permission to visit Site 3.
- 17. April 28, 1982 Hearing held on Grace violations. Neither Mr. Grace nor a representative made an appearance at the hearing.
- April 30, 1982 Order to Mr. Grace to cease and desist all violations by submitting a reclamation plan within 15 days and completing all restoration operations by June 30, 1982.
- 19. May 11, 1982 Triple S Development Corporation submits a reclamation plan for the ISL sites (Sites 1 and 2).
- June 15, 1982 NMEID approves the reclamation plan with certain conditions, including requirement for surface reclamation of Site 3.
- June 28, 1982 Expiration date of license extended to September 30, 1982.
- August 16, 1982 Letter from Grace's attorney disputing ground-water testing requirements in the June 15, 1982, approved reclamation plan.
- September 27, 1982 Expiration date of license extended to December 31, 1982.
- 24. October 19, 1982 While visiting a nearby site, NMEID noted that no changes were evident at Grace Site 2.

- 25. November 4, 1982 NMEID response to Grace's August 16, 1982, letter, denying request. Also, NMEID expressed concern about time it was taking to accomplish reclamation, and indicated legal action would be taken if reclamation was not completed by December 31, 1982.
- 26. December 6, 1982 Letter from NMEID to Grace:
 - A. extending expiration date of license to until reclamation is completed;
 - B. requiring completion of reclamation by December 31, 1982; and
 - C. informing that failure to complete will result in legal action, including civil penalties.
- December 15, 1982 Letter from Grace Energy acknowledging December 6, 1982, letter and requesting a 3-month extension (to March 31, 1983) to complete reclamation.
- December 16, 1982 Letter from NMEID to Grace Energy denying the 3-month extension.
- January 7, 1983 Complaint for Injunctive Relief and Civil Penalties was filed by the NMEID against Michael P. Grace in Sandoval County, New Mexico.
- 30. April 26, 1983 Stipulation in Sandoval County (NM) District Court between NMEID and Michael P. Grace (No. SCV-83-08) whereby Grace agreed to submit a reclamation plan by May 13, 1983, and to complete reclamation.
- 31. June 13, 1983 Meeting between NMEID and representatives of Grace to discuss reclamation plans and requirements. Apparent agreement to survey the sites and meet again on June 30, 1983, to present survey results and a plan.
- 32. June 20-21, 1983 Visits to Sites 1 and 2 by consultants of Grace (Los Alamos Technical Associates). Site conditions were consistent with previous descriptions. Unable to visit Site 3 due to lack of permission from landowner (Santa Fe Railway).
- June 30, 1983 Meeting between LATA and NMEID to discuss reclamation of Sites 1 and 2.
- August 9, 1983 NMEID visit to Site 1; observed drilling contractor cleaning wells for ground-water sampling.

- 35. October 14, 1983 Letter from LATA summarizing survey activities for Sites 1 and 2 and proposing a reclamation plan.
- 36. December 5, 1983 Internal NMEID memorandum addressing the results of ground-water sampling at Sites 1 and 2. Recommendation was to accept the results and proceed with well plugging and surface reclamation.
- 37. December 6, 1983 Letter from NMEID providing guidelines for reclamation of Sites 1 and 2, exclusive of ground-water restoration criteria.
- 38. December 7, 1983 Letter from NMEID to LATA discussing ground-water reclamation at Sites 1 and 2. No additional ground-water sampling or restoration activities were required at either Site 1 or Site 2. Reclamation to consist of proper plugging and abandonment of all wells.
- 39. May 10, 1984 NMEID internal memorandum indicating that a visit to Site 3 was made on April 18, 1984, pursuant to a court order issued on January 14, 1984. Radiation measurements and soil samples were taken, and a general site inspection was performed.
- 40. September 26, 1984 Draft letter from NMEID to LATA providing reclamation guidelines for Site 3.
- October 12, 1984 Internal NMEID memorandum documenting the survey and sampling procedures and their locations for activities conducted on April 18, 1984, at Site 3.
- 42. November 21, 1984 Letter from NMEID to attorney for Grace indicating that reclamation had not commenced at 2.9 of the sites, and that if reclamation was not commenced by December 31, 1984, further legal action would be sought.
- 43. January 17, 1985 Letter from attorney for Grace to NMEID stating that difficulties had hopefully been worked out between Grace and his reclamation contractor and that work would proceed.
- 44. February 26, 1985 Letter from NMEID to attorney for Grace indicating that, due to a lack of specificity and commitment, NMEID would prepare written reclamation plans for each of the three sites.
- 45. March 13, 1985 Internal NMEID memorandum providing detailed procedures for well plugging at Sites 1 and 2.
- May 1985 Detailed site characterization report of Site 3 prepared by NMEID following a site visit on February 18-19, 1985.

- 47. August 7, 1985 Internal NMEID memorandum describing procedures and standards for cleanup of all three sites.
- 48. October 2, 1985 Letter from NMEID to attorney for Grace transmitting the reclamation plans for all three sites (the plans, as enclosures, are not in the files).
- 49. May 23, 1986 NRC order returning authority for licensing and regulation of NM facilities to the NRC.
- 50. January 21, 1988 Initial telephone contact by NRC with a representative of Grace Energy in Venice, CA.
- 51. January 22, 1988 Attorney for Mr. Grace returned telephone call to NRC. The need to discuss the status of the three NM sites and the conditions necessary to terminate the license were discussed.
- 52. January 26, 1988 NRC contacted the attorney for Mr. Grace by telephone, who indicated the information had been passed to a representative of Grace Energy and that he no longer represented Mr. Grace.
- 53. February 1, 1988 NRC contacted a representative of Grace Energy by telephone, who stated that Mr. Grace informed him that the State of NM had performed verification surveys and issued a clearance for the site. NRC indicated that no such records are in the files, and that any such information should be sent to the NRC in order to determine its adequacy and proceed with license termination.
- 54. March 22, 1988 Grace's operations manager returned telephone calls placed by NRC on March 21, 1988. She indicated she would review the files, locate cleanup documentation, and meet with Mr. Grace to discuss closeout issues.
- 55. April 11, 1988 Grace's operations manager was contacted by telephone. She indicated that a contractor had been responsible for site cleanup, that she had been unable to reach him by telephone, and that she had sent him a letter.
- 56. May 16, 1988 Grace's operations manager was contacted by telephone. She indicated she would send a report from Grace's contractor, indicating their water quality and soil analysis results were accepted by NMEID.
- 57. An undated, handwritten letter from Grace's operations manager to the NRC, enclosing incomplete and inadequate documentation of site

activities, which provided no evidence of any activity having occurred at any of the three sites. The letter stated that "files with the EID should show the completion of our work," (which they do not). The letter also stated that "the end result will be in the hands of" their contractor in NM. The letter ends with an assurance of assistance in any way.

- 58. September 25, 1992 Site No. 1 located near Church Rock, New Mexico, was located by NRC personnel. An official inspection was not performed, but it was determined that the site was not reclaimed in accordance with NRC requirements.
- 59. November 19, 1992 Site No. 2 located near Bibo, New Mexico, was inspected (NRC Inspection Report 40-8912/92-01), and it was determined that the site was not reclaimed in accordance with NRC requirements. The inspection report was sent to Michael P. Grace, 1101 Oceanfront Walk, Suite 4, Venice, California, 90291.
- 60. January 15, 1993 NRC certified letter to Michael P. Grace, P.O. Box 1033, Venice, California, 90291, issuing Source Material License SUA-1480. Grace was requested to:
 - A. File an amendment request within 30 days updating the license to reflect nonoperational status.
 - B. Submit a reclamation plan for all three sites no later than June 1, 1993.
- January 21, 1993 Certified letter was signed for. Signature was illegible.
- 62. February 22, 1993 NRC contacted Grace Oil in Carlsbad, New Mexico, regarding the location of Mr. Grace. Mr. Michael Morris of Grace Oil indicated that he would convey a message to a Grace Energy representative but was unwilling to provide a name or telephone number.
- 63. February 26, 1993 Mr. Lamb of Lamb, Metzgar, Lians, and Dahl of Albuquerque, New Mexico, contacted URFO. Grace Oil had contacted Mr. Lamb as his firm had handled the 1984 lawsuit for Grace Energy with the State of New Mexico. The lawsuit was reportedly dismissed as the plaintiff had failed to vigorously prosecute. Mr. Lamb indicated that contacting Mr. Grace may be difficult.
- 64. July 22, 1993 A female identifying herself only as an employee of Mr. Grace contacted URFO to discuss a bill that Grace had received. It

is assumed that the billing was for the November 1992, inspection conducted at Site 2.